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09/708,575	11/09/2000	Akihiko Nakao	PM275334	2122

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EXAMINER

LE, BRIAN Q

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 12/17/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,575

Applicant(s)

NAKAO, AKIHIKO

Examiner

Brian Q Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

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Claim Objections

1. Claim 9 is objected to because of the following informalities: The definition of IC is needed so on skilled in the art can understand. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda U.S. Patent No. 5,050,218.

Regarding claim 1, Ikeda teaches a location information recognition apparatus (address recognition) (Abstract, first line) for recognizing location information written on a letter and constituted by categories (Abstract) which form a hierarchical structure with a plurality of stages changing in units of various countries (address dictionary includes country, state, street, zip code etc..) (FIG. 3, element 5 and element 6), comprising:

means for selecting a dictionary and a procedure from a plurality of dictionaries corresponding to the various countries (FIG. 3, box 4, element 5 and element 6), respectively, and used to recognize the location information, and various recognition procedures which vary with the country and each of which corresponds to each category of the hierarchical structure with the plurality of stages of the location information (FIG. 4);

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means for reading the location information written on the letter (FIG. 9, elements 1 and 7); and

means for recognizing the read location information using the selected dictionary in accordance with the recognition procedure selected by said selection means (FIG. 9, elements 12-14).

Regarding claim 2, Ikeda further teaches a location information recognition method of recognizing location information (address recognition) (Abstract, first line) constituted by categories which form a hierarchical structure with a plurality of stages varying with the country (FIG. 4), comprising the steps of:

Having a plurality of dictionaries corresponding to the various countries (address book has corresponding countries, city, street, zipcode etc..) (Column 3, line 19), respectively, and use to recognize the location information;

Having various recognition procedures with vary with the country and each of which corresponds to each category of the hierarchical structure with the plurality of stages of the location information (recognition process to recognize address indicator whether countries, city, street etc..) (Column 4, lines 20-26 and FIG. 5a, 'operation of block 34'); and

In recognizing the location information, selecting one of the dictionaries, selecting one of the recognition procedures, and performing recognition processing (column 3, lines 3-30) on the basis of the selected dictionary and recognition procedure (FIG. 3, box 4 and elements 5-6, FIG. 5(b)).

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For claim 3, please refer to claims 1-2 for the explanation. In addition, Ikeda also teaches a recording medium (memory) to perform the aforementioned limitations (column 4, lines 28-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda U.S. Patent No. 5,050,218 and further in view of Yui U.S. Patent No. 6,266,431.

Regarding claim 4, Ikeda teaches a location information recognition apparatus comprising:

Read means for reading a location information image (FIG. 3, element 1);

Line detection means for detecting one or some character lines from the location information image read by said read means (column 8, lines 28-29, 34, 38);

Region detection means for detecting one or some regions where location information is written from the location information image read by said read means (The detection of avenue, block, building, floor etc.. are the detection of each individual regions) (FIG. 5 (a), 'operation of block 34);

Location information word detection means for dividing the character line detected by said line detection means and included in the location information region detected by said region detection means into one or a plurality of word regions (column 8, lines 20-45);

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Word recognition means for recognizing a word by comparing character information included in the word region obtained by said location information word detection means with a content of a word dictionary in which place names present in an area as a recognition target are registered (column 8, lines 45-68); and

Output means for outputting a recognition result by said word recognition means as a recognition result of the location information (column 4, lines 46-55).

However, Ikeda does not explicitly teach the concept of collation. Yui teaches a mail address recognition method that applies the collation method (abstract). Modifying Ikeda's method of location information recognition according to Yui would be able to confirm whether the corrected address exists or not with reference to an address information (abstract, last 3 lines). This would improve processing and therefore, it would have been obvious to one of ordinary skill in the art to modify Ikeda according to Yui.

For claim 8, Ikeda further teaches an apparatus wherein the location information image read by said read means is constituted by categories which form a hierarchical structure with a plurality of stages (FIG. 4),

Said word recognition means (FIG. 3, elements 1 and 2) comprises

Setting means for setting an order of recognition of words in each word region obtained by said location information word detection means, which corresponds to each category of the hierarchical structure with the plurality of stages constituting the location information (FIG. 4 and FIG. 5(a)), and

Second word recognition means (FIG. 4, word (2)) for recognizing the word by collating the character information (as discussed in claim 4) included in the word region obtained by said

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location information word detection means with a content of one of a plurality of word dictionaries in which different place names present in the area as the recognition target are registered in units of categories in accordance with the order of recognition for each word region, which is set by said setting means (FIG. 4 and FIG. 5(b)), and

Said output means outputs a recognition result corresponding to each category by said second word recognition means as the recognition result of the address information (column 6, lines 10-14; column 8, lines 15-20).

Regarding claim 9, please refer back to claim 8 for the explanation.

For claim 10, please refer back to claim 8 for the explanation. In addition, Ikeda teaches word extraction means (FIG. 3, elements 1 and 2), corresponding to one of a plurality of word dictionaries in which different place names present in the area as the recognition target are registered in units of categories, for extracting one or a plurality of words in the word dictionary, the words matching at least some of a plurality of combinations of character strings constituted by the character information included in the word region obtained by said location information word detection means (FIG. 3; column 4, lines 5-13).

Regarding claim 11, please refer back to claim 10 for the explanation.

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Allowable Subject Matter

6. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

CONCLUSION

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to location information, postal, address recognitions:

U.S. Pat. No. 6,577,749 to Rosenbaum, teaches method and device for recognition of delivery data on mail matter.

U.S. Pat. No. 6,327,373 to Yura, teaches mail address reading apparatus and mail sorting apparatus.

U.S. Pat. No. 6,246,794 to Kagehiro, teaches method of reading characters and method of reading postal addresses.

U.S. Pat. No. 5,754,872 to Miyake, teaches character information processing system.

U.S. Pat. No. 6,587,572 to Suchenwirth-Bauersaches, teaches mail distribution information recognition method and device.

U.S. Pat. No. 6,266,431 to Kiyono, teaches address recognizing method and mail processing apparatus.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL
December 2, 2003



SAMIR AHMED
PRIMARY EXAMINER